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(54) Title: **A REFLUX CLASSIFIER**

(57) Abstract

A reflux classifier for segregating particles by size or density uses a fluidized bed in a chamber (10). Arrays of inclined plates (14A, 14B and 14C) forming lamellae (12A, 12B and 12C) divide the chamber into zones into which particles of predetermined size or density migrate. Particle differentiation is controlled by plate length, inclination and spacing in each array, combined with fluidization rate. Both batch and continuous processes are described.

